Title (en)

2000 SERIES ALLOYS WITH ENHANCED DAMAGE TOLERANCE PERFORMANCE FOR AEROSPACE APPLICATIONS

Title (de)

ALUMINIUMLEGIERUNGEN DER 2000ER SERIE MIT VERBESSERTER SCHADENSTOLERANZLEISTUNG FÜR ANWENDUNGEN IN DER LUFTFAHRT

Title (fr)

ALLIAGES DE LA SÉRIE 2000 PRÉSENTANT UNE TOLÉRANCE AUX DOMMAGES ACCRUE POUR APPLICATIONS AÉROSPATIALES

Publication

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Application

EP 06827945 A 20060907

Priority

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- US 22042405 A 20050907

Abstract (en)

[origin: WO2007111634A2] The invention provides a 2000 series aluminum alloy having enhanced damage tolerance, the alloy consisting essentially of about 3.0-4.0 wt% copper; about 0.4-1.1 wt% magnesium; up to about 0.8 wt% silver; up to about 1.0 wt% Zn; up to about 0.25 wt % Zr; up to about 0.9 wt% Mn; up to about 0.5 wt% Fe; and up to about 0.5 wt% Si, the balance substantially aluminum, incidental impurities and elements, said copper and magnesium present in a ratio of about 3.6-5 parts copper to about 1 part magnesium. The alloy is suitable for use in wrought or cast products including those used in aerospace applications, particularly sheet or plate structural members, extrusions and forgings, and provides an improved combination of strength and damage tolerance.

IPC 8 full level

C22C 21/12 (2006.01); **C22C 21/14** (2006.01)

CPC (source: EP US)

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Citation (search report)

See references of WO 2007111634A2

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